



WORKPLACE SAFETY AND HEALTH IN ARIZONA

*From The
National Institute for Occupational Safety and Health*



State Profile 2002

*Delivering on the Nation's promise:
Safety and health at work for all people through prevention.*

The National Institute for Occupational Safety and Health

NIOSH is the primary federal agency responsible for conducting research and making recommendations for the prevention of work-related illness and injury. NIOSH is located in the Department of Health and Human Services in the Centers for Disease Control and Prevention. The NIOSH mission is to provide national and world leadership to prevent work-related illness, injury, disability, and death by gathering information, conducting scientific research, and translating the knowledge gained into products and services. As part of its mission, NIOSH supports programs in every state to improve the health and safety of workers. NIOSH has developed this document to highlight recent NIOSH programs important to workers and employers in Arizona.

The Burden of Occupational Illness and Injury in Arizona

- In Arizona, there are approximately 2.3 million individuals employed in the workforce.¹
- In 2000, 118 workers died as a result of workplace injuries.²
- The construction industry had the highest number of fatalities, followed second by services, and third by transportation and public utilities.²
- In 1999, the most recent year for which data are available, the rate of fatal workplace injuries was 3.1 deaths per 100,000 workers – below the national average rate of 4.5 deaths per 100,000 workers.²
- In 2000, there were 112,800 nonfatal workplace injuries and illnesses in Arizona.³

The Cost of Occupational Injury and Illness in Arizona

In 2000, the most recent year for which data are available, a total of \$481.5 million was paid for workers' compensation claims by Arizona private insurers, self-insured employers, and state funds.⁴ This figure does not include compensation paid to workers employed by the federal government and also underestimates the total financial burden for private sector businesses, since only a fraction of health care costs and earnings lost through work injuries and illnesses is covered by workers' compensation. Chronic occupational illnesses like cancer are substantially under-reported in workers' compensation systems because work-relatedness is often difficult to establish.

How NIOSH Prevents Worker Injuries and Diseases in Arizona

Health Hazard Evaluations (HHEs) and Technical Assistance

NIOSH evaluates workplace hazards and recommends solutions when requested by employers, workers, or state or federal agencies. Since 1993, NIOSH has responded to 45 requests for HHEs in Arizona in a variety of industrial settings, including the following examples:

Lake Powell, Arizona: Houseboat-Related CO Poisoning

The houseboat generator-related carbon monoxide (CO) poisoning deaths of two brothers on Lake Powell, Arizona, triggered an interagency federal investigation in August 2000. As part of the investigation, the National Park Service requested an HHE to evaluate employee exposure to CO when working with boats. NIOSH investigators found extremely high concentrations of CO beneath and around the boat decks. As the epidemiologic investigation continues, more than 130 poisonings have been identified on Lake Powell alone, 11 of which were fatal. More than 300 severe poisonings have been reported on lakes throughout the United States. These findings have resulted in a broad collaboration among federal agencies and boat manufacturers working together to prevent future deaths and poisonings. With funding from the U.S. Coast Guard, NIOSH began extensive evaluations of engineering controls. In addition, interagency training and public awareness programs are being developed to target the boating community, medical professionals, law enforcement officials who investigate fatalities, and the general public. Recalls are underway by the U.S. Coast Guard that are aimed at retrofitting existing houseboats.

Crownpoint, Winslow, and Tuba City, Arizona: Work-Related Musculoskeletal Disorders (MSDs)

In 1998, NIOSH responded to a request from the Dental Services Branch of the Indian Health Service to evaluate possible MSDs, particularly neck disorders, among their staff. NIOSH investigators concluded the dental assistants had a higher prevalence of MSDs than the dentists. Investigators recommended replacing older rear delivery equipment with over-the-patient equipment, ensuring existing equipment functions properly, using height-adjustable examination chairs, and maintaining good posture while working.

Fatality Assessment and Control Evaluation (FACE) Investigations

NIOSH developed the FACE program to identify work situations with a high risk of fatality and to formulate and disseminate prevention strategies. Since 1995, there have been two FACE investigations in Arizona.

Building State Capacity

State-Based Surveillance

NIOSH funds the Adult Blood Lead Epidemiology and Surveillance Program (ABLES) in the Arizona Department of Health Services. Through ABLES, the agency's staff track and respond to cases of excessive lead exposure in adults which can cause a variety of adverse health outcomes such as kidney or nervous system damage and potential infertility.

Graduate Training Program

NIOSH funds a master's program in industrial hygiene/ toxicology and environmental and occupational health at the University of Arizona. In fiscal year 2001, nine students were enrolled and three were graduated.

Additional information regarding NIOSH services and activities can be accessed through the NIOSH home page at <http://www.cdc.gov/niosh/homepage.html> or by calling the NIOSH 800-number at 1-800-356-NIOSH (1-800-356-4674).

¹U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics, Current Population Survey, 2000.

²DOL, BLS in cooperation with state and federal agencies, Census of Fatal Occupational Injuries, 1999-2000.

³DOL, BLS in cooperation with participating state agencies, Survey of Occupational Injuries and Illnesses, 2000.

⁴National Academy of Social Insurance, *Workers' Compensation: Benefits, Coverage, and Costs, 2000 New Estimates*, May 2002.

